

/184 cont. /

534	I	II	III	IV	V	VI	Thumb
	19.8	22.6	25.7	28.9	31.8	35.0	1.65

The total length of the flute is 39.8 cm.

[199] We do not find the same disposition of the holes on pre-Spanish quena; according to all probability European influence has played a part here.

Flutes with mouthpieces. When the quena is played the current of air is shaped and directed with the lips and must be conducted against the beveled edge of the mouth to break up there and set the column of air in the pipe vibrating. For flutes with mouthpieces (Fig. 11) the formation of the current of air and the direction given to it are produced automatically; it is sufficient to blow and to control the strength of the air current. The air is led through a "vent" (see Figure 10, a /see p. 175/, which shows us a flute with mouthpiece in section) composed of the space between the walls of the pipe and a block of some material inserted in the opening of the flute. The air passes through this channel and strikes against the lower bein (lip).

[204] Chipaya flutes with mouthpieces are made of cola (Baccharis cola). These Indians /185/ make them themselves, taking an old one as a model to give them the distance between the holes. These flutes are made of a branch which is split along its entire length. The two halves are hollowed out and then joined again in such a way that the air cannot escape. Where a perfect joint could not be made, the chinks have been sealed with resin. Since it is difficult with the bushes at the disposal of the Chipaya to come across straight branches, most of the flutes are not straight. Some even have the shape of a segment of a circle, a form which is perhaps intentional (Fig. 8, H /see p. 173/).



51cm.

Fig. 11.
Flute with
mouthpiece.